Substitute Form PTO-1449

U.S. Department of Commerce Patent and Trademark Office Attorney's Docket No. 16459-006001

Application No. 10/723,987

is formation Disclosure Statement

by Applicant
(Use several sheets if necessary)

Alexei A. Erchak et al.

Filing Date November 26, 2003

Applicant

Group Art Unit 2822

COLD STATE	U.S. Patent Documents						
Exam. Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
MIC	AA	5,126,231	June 30, 1992	Levy			
	AB	6,778,746	August 17, 2004	Charlton, et al.			
	AC	6,849,558	February 1, 2005	Schaper			
	AD	6,742,907	June 1, 2004	Funamoto, et al.			
	AE	2004/0110856	June 10, 2004	Young, Jung Gun et al.			
	AF	2004/0144985	July 29, 2004	Zhang, Zhibo, et al.			
	AG	4,864,370	September 5, 1989	Gaw et al.			
	AH	3,293,513	August 8, 1962	J.R. Biard et al.			
	AI	3,922,706	November 25, 1975	Kaiser			
	AJ	6,307,218	October 23, 2001	Steigerwald et al.			
	AK	2005/0051785	March 10, 2005	Erchak et al.			
	AL	2004/0207323	October 21, 2004	Erchak et al.			
	AM	2004/0207319	October 21, 2004	Erchak et al.			
	AN	2005/0051787	March 10, 2005	Erchak et al.		•	
	AO	2005/0040419	February 24, 2005	Erchak et al.			,
	AP	2005/0087757	April 28, 2005	Erchak et al.			
	AQ	2004/0207310	October 21, 2004	Erchak et al.			
	AR	2004-0207320	October 21, 2004	Erchak			
	AS	2004-0206962	October 21, 2004	Erchak et al.			
	AT	2005-0087754	April 28, 2005	Erchak			
	AU	2004-0259279	December 23, 2004	Erchak et al.			
	AV	2004-0259285	December 23, 2004	Erchak et al.			
	AW	2005-0127375	June 16, 2005	Erchak et al.			
	AX	2005-0059179	March 17, 2005	Erchak et al.			
	AY	2005-0040424	February 24, 2005	Erchak et al.			
U	AZ	2005-0059178	March 17, 2005	Erchak et al.			

Examiner	Signature/	

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Disclosure Form (PTO-1449)

	(Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 16459-006001	Application No. 10/723,987
	Imprmation Disc	closure Statement	Applicant Alexei A. Erchak et al.	
	(Use several sh	eets if necessary)	Filing Date November 26, 2003	Group Art Unit 2822
V	(37 CFR \$1,98(b))			

	Foreign Patent Documents or Published Foreign Patent Applications								
Examiner	Desig.	Document	Publication	Country or			Trans	slation	
Initial_	ID	Number	Date	Patent Office	Class	Subclass	Yes	No	
MC	AAA	WO 98/14986	04/09/98	PCT					
	ABB				4				
	ACC								
	ADD								
-	AEE								

	Other Documents (include Author, Title, Date, and Place of Publication)							
Examiner Initial	Desig. ID	Document						
	AFF							
	AGG							
	АНН							
	AII							

Examiner Signature	Date Considered
EXAMINER: Initials obtation considered. Draw line through citation if no next communication to applicant.	t in conformance and not considered. Include copy of this form with

SEP. 30. 2005 4:38PM (3) FISH & RICHARDSON 617542890SENTRAL FAX CENTER 3925 P. 3/3

SEP 3 0 2005 Sheet <u>1</u> of <u>1</u> Application No. Attorney's Docket No. U.S. Department of Commerce Patent and Trademark Office Substitute Form PTO-1449 10/723,987 16459-006001 (Modified) Applicant Information Disclosure Statement Alexei A. Erchak et al. by Applicant . **Group Art Unit** (Use several sheets if necessary) Filing Date 2822 November 26, 2003 (37 CFR §1.98(b))

U.S. Patent Documents								
Examiner Initial	Desig.	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate	
MC	AA	6,534,798 B1	03-2003	Scherer et al.				
MC	AB	6,522,063 B2	02-2003	Chen ct al.				
m	AC	2004/0027062	02-2004	Shiang et al.				
	AD							
	AE							
	AF							
	AG							
	AH						<u> </u>	
	AI				_			
	AJ		<u> </u>					
	AK						<u> </u>	

	Foreign	- Batent Doc	uments or Pu	blished Foreign	Patent A	application	15	
Examiner	Desig.	Document	Publication	Country or			112113	_
Initial	ID ID	Number	Date	Patent Office	Class	Subclass	Yes	No_
	AL					·		
	AM							
	AN							
	AO							
	AP							L

	Other Documents (include Author, Title, Date, and Place of Publication)						
Examiner Initial	Desig. ID	<u>Document</u>					
	AQ						
	AR						
	AS						
	AT						

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw-line through citation if no	In conformance and not considered. Include copy of this form with
next communication to applicant.	Substitute Disclosure Form (PTO-1449)

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Harring Office	Attorney's Docket No. 16459-006001	Application No. 10/723,987
by Ap	closure statement & pplicant SEP 0 2 2005	Applicant Alexei A. Erchak et al.	
(Use several sh	eets if necessary) 2 2003	Filing Date November 26, 2003	Group Art Unit 2822

			9.3. Pate	ent Documents			
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
ML	AA	5,132,751	July 21, 1992	Shibata, et al.			
	AB					•	
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner	Desig.	Document	Publication	Country or			Translation	
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	AL							
	AM			_				
	AN							
	AO							
	AP							

	Other Documents (include Author, Title, Date, and Place of Publication)						
Examiner Initial	Desig. ID	Document					
MC	AQ	A. Köck et al., "Novel surface emitting GaAs/AlGaAs laser diodes based on surface mode emission," Appl. Phys. Lett. 63 (9), 30 August 1993, pages 1164-1166					
mC	AR	A. Köck et al., "Strongly directional emission from AlGaAs/GaAs light-emitting diodes," Appl. Phys. Lett. 57 (22), 26 November 1990, pages 2327-2329					
	AS						
	AT						

Examiner Signature 0 / /	Date Considered ,
	11100
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
EXAMINER: Initials diation considered. Draw line through citation	on if not in conformance and not considered. Include copy of this form with
next communication to applicant.	•
	Substitute Disclosure Form (PTO-1449)

Sheet	1 of	1

	Substitute Fo	m PTO-1449	U.S. Department of
\\P	(Modified)		Patent and Trade
0	1 B		losure Statement
۱ .	16 Jun. 2		plicant
1 CEB	1 [(Use several she	eets if necessary)

U.S. Department of Commerce Patent and Trademark Office Attorney's Docket No. 16459-006001

Application No. 10/723,987

Applicant

Alexei A. Erchak et al.

Filing Date November 26, 2003

Group Art Unit 2822

U.S. Patent Documents Publication Examiner Desig. Document Filing Date Initial ID Number Date Patentee Class Subclass If Appropriate August, 2004 6,784,463 Camras et al. AA AB 2004/0043524 March, 2004 Huang et al. AC AD ΑE AF AG AH ΑI ΑJ ΑK

	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner	Desig.	Document	Publication	Country or			Trans	lation
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	AL							,
	AM							
	AN	<u>-</u>						
	AO							
	AP							

	Other Documents (include Author, Title, Date, and Place of Publication)						
Examiner	Desig.						
Initial	ID	Document					
	AQ						
	AR	•					
	AS						
	AT						

	<u> </u>
Examiner Signature/////	Date Considered
	(1)///
EXAMINER: Initials citation considered. Draw line through citation if no	ot in conformance and not considered. Include copy of this form with
next communication to applicant.	

Sheet 1 of 1

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 16459-006001	Application No. 10/723,987	
by A	sclosure Statement pplicant	Applicant Alexei A. Erchak et al.		
(Use several s (37 CFR §1.98(b))	theets if necessary)	Filing Date November 26, 2003	Group Art Unit 2822	

				U.S. Pate	ent Documents		· · · · · · · · · · · · · · · · · · ·	
Exam Initi		Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
Y\\\	<u>(</u>	AA	6.335,548 B1	01-2002	Roberts et al.			
		AB	6,388,264 B1	07-2001	Ghosh et al.			
		AC	6,265,820 B1	05-2002	Pace, Benedict G			
		AD	2003/0209714	11-2003	Taskar et al.			
(AE	6,614,056	09-2003	Tarsa et al.	1.		
$\overline{\mathbb{W}}$		AF	6,946,683	09-2005	Sano et al.			
		AG						
		AH						
		AI			·	11		
		AJ						
-		AK						

	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass		lation
	AL							
	AM							
	AN					,		
	AO			***				
	AP.				1			

	Other Documents (include Author, Title, Date, and Place of Publication)						
Examiner Initial	Desig. ID	Document					
	AQ						
	AR						
	AS						
	AT						

Examiner Signature	Date Considered
	11/17/05
EXAMINER: Initials citation considered. Draw line through citation if no	t in conformance and not considered. Include copy of this form with
next communication to applicant.	
	Control District Francisco Francisco Addition

Sheet	1	۰£	1
Sneet	1	of	1

	•	i			
/	0	Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 16459-006001	Application No. 10/723,987
THE STATE OF THE S	AUS 0 1 2005 Anformation Dis	sclosure Statement	Applicant Alexei A. Erchak et al.		
A	A B	(Use severa	sheets if necessary)	Filing Date November 26, 2003	Group Art Unit 2822

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
mc	AA	5,600,483	February 4, 1997	Fan et al.			
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner	Desig.	Document	Publication	Country or		Subclass	Translation	
Initial	ID	Number	Date	Patent Office	Class		Yes	No
	AL							
	AM							
	AN							
<u> </u>	AO							
	AP					·		

	Other Documents (include Author, Title, Date, and Place of Publication)					
Examiner	Desig.					
Initial	ID	Document				
	AQ					
	AR					
	AS	·				
	AT					

Examiner Signature / / //		Date Considered		
		\	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	70
EXAMINER: Initials ditation considered	I. Draw line through citation if no	t in conformance and	not considered.	Include copy of this form with
next communication to applicant.				
			Substit	tute Disclosure Form (PTO-1449)